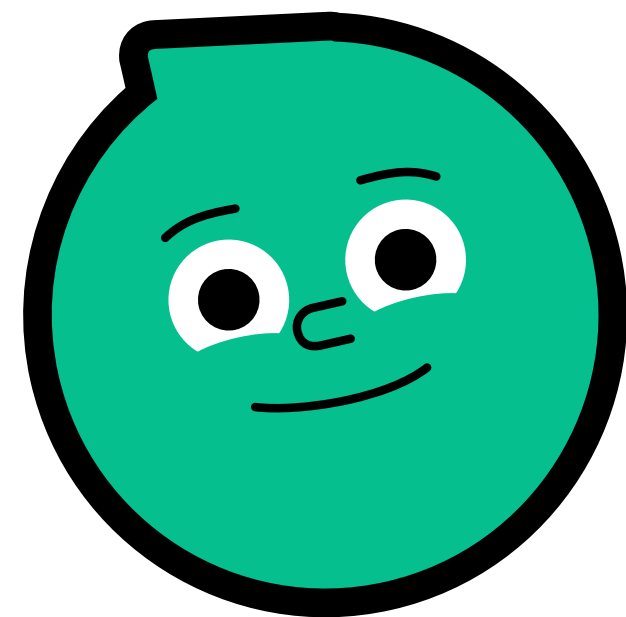


Math and Video Games!

Elementary School – Cycle 2



Scaffolded
Problem

Scenario

For a whole day, the students in Grades 3 and 4 will get to have their own video game room in the school.

It's a big project, and your teacher needs help. She chose you to help her.

You need to do the following:

- Calculate the quantities of equipment needed based on the number of students participating.
- Calculate the equipment rental costs.

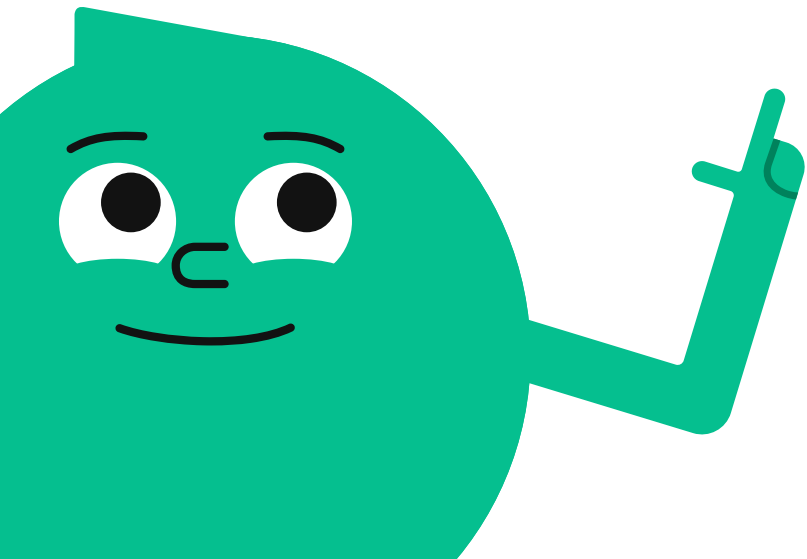


→ *What clues are missing?*

→ *What information do you need to solve this problem?*

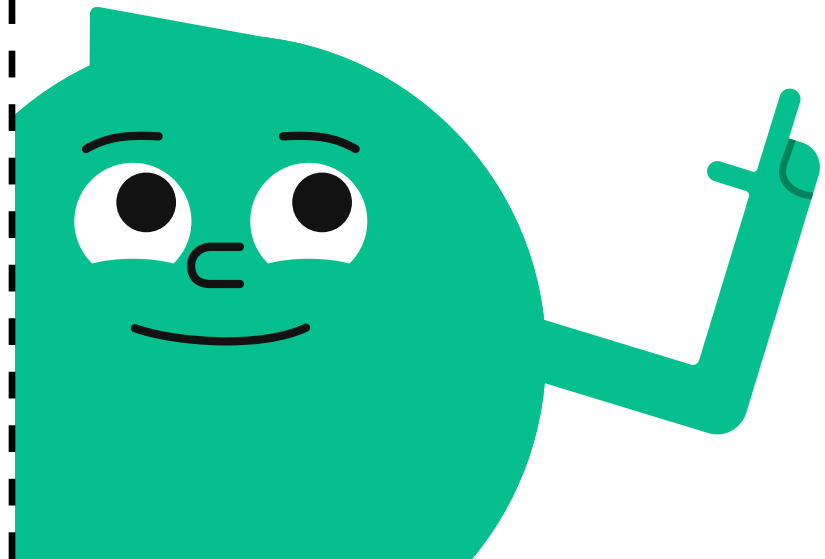
Number of Students

Grade Level	Number of Students
Grade 3	55 students
Grade 4	65 students

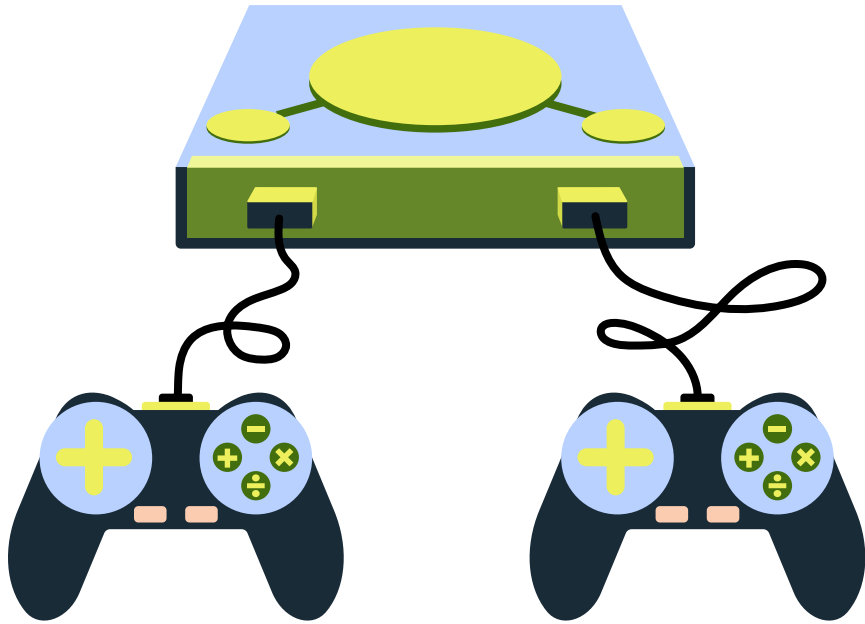


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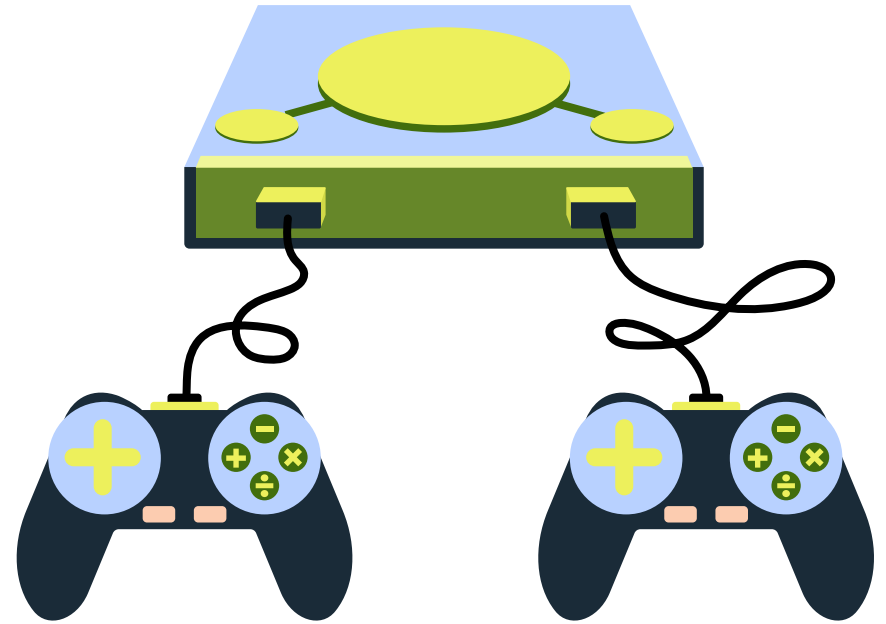


Equipment Needed



- There must be enough video game controllers so that half of the Grade 3 and Grade 4 students can play at the same time.
- There needs to be 20 video games available to students.
- There needs to be 10 *retro* game consoles.
- There needs to be 8 *new-generation* game consoles.
- The number of TVs needed is equal to the total number of *retro* and *new-generation* consoles.

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Equipment Rental Costs

Equipment Rental Costs for One Day	
Equipment	Cost (\$)
1 box of 10 video games	8
1 <i>retro console</i>	17
1 <i>next-generation console</i>	15
1 controller	3
1 television	35



Equipment Rental Costs

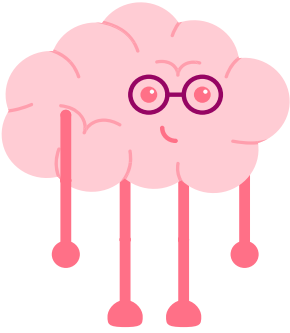
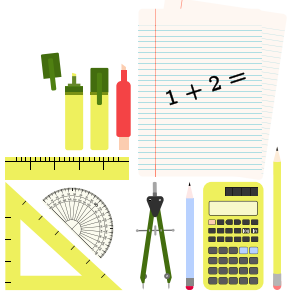

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Observation Rubric

Student's name: _____

Date : _____

Mathematical Criteria	Observable Elements	Teacher's Comments
<p>understanding of the scaffolded problem</p> 	<ul style="list-style-type: none"> <input type="checkbox"/> The student asks the teacher clear, relevant questions to receive clues. <input type="checkbox"/> The student takes the constraints of the problem into account. <input type="checkbox"/> The student adapts flexibly when new constraints are introduced. <input type="checkbox"/> The student represents the problem using materials and equipment, drawings, or diagrams. 	
<p>Student's effort</p> 	<ul style="list-style-type: none"> <input type="checkbox"/> The student chooses the right mathematical concepts to solve the scaffolded problem. <input type="checkbox"/> The student correctly applies the concepts and processes. 	
<p>Explanation</p> 	<ul style="list-style-type: none"> <input type="checkbox"/> The student explains their choices. <input type="checkbox"/> The student shows their mathematical work clearly to explain their solution.. 	